



NBW-003-013405 Seat No. _____

M. Sc. (Biotechnology) (Sem. IV) (CBCS) Examination

April / May - 2017

BT - 423 : Pharmaceutical Biotechnology

Faculty Code : 003

Subject Code : 013405

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- 1** Answer any **seven** (2 marks each) **14**
- (i) What is the full form of MALDI-TOF?
 - (ii) What is isoelectric point?
 - (iii) What is *in-silico* drug designing?
 - (iv) Enlist secondary infections that occur in HIV patients.
 - (v) What is drug dosage?
 - (vi) What is DNA microarray?
 - (vii) What are acute and chronic infections?
 - (viii) Enlist various classes of antibiotics.
 - (ix) Enlist oxidative drug metabolizing enzymes.
 - (x) What is a vaccine?
- 2** Answer any **two** of the following : (7 marks each) **14**
- (i) Give an account of Positional cloning.
 - (ii) What is isoelectric focusing? Comment on 2D gel electrophoresis.
 - (iii) Describe the applied significance of Human Genome Project.
- 3** Answer the following : (7 marks each) **14**
- (i) Describe factors important for designing drugs against HIV viruses.

(ii) Explain in detail structure of HIV.

OR

3 Answer the following : (7 marks each) **14**

(i) Give an account of commercially available anti-HIV drugs.

(ii) Describe Genome variation among HIV strains.

4 Answer the following : (7 marks each) **14**

(i) Describe the phases of drug metabolism.

(ii) Write a note on molecular diagnosis.

5 Write a short note on any **two** of the following : **14**
(7 marks each)

(i) DNA vaccines

(ii) Aminoglycosides antibiotics

(iii) Antibiotic resistance

(iv) Antibiotics affecting cell-wall synthesis.
